

### **REMARKS/ARGUMENTS**

Claims 1, 3-10, 12-21, 23, 24, 26-28, 33-37, and 39-54 remain in the application.

#### **A. Objections and rejections under 35 U.S.C. 112.**

Withdrawal of the objections to claims 39, 41, 46 and 47 as well as 13, 33, 35, and 38-40 under 35 U.S.C. 112 is noted.

#### **B. Premature Final Office Action.**

Finality of the Office Action is believed to be premature and withdrawal is respectfully requested. The office action relies on the newly cited Gershman reference to reject claims 42 and 43. The amendments made to claim 42 function to move a limitation that originally appeared in claim 43 into claim 42, and cancel the corresponding subject matter from dependent claim 43. In addition, the amendment added a more detailed description of the element that was moved, however, this detail is believed to be subject matter that could have been clearly anticipated by the Examiner and was insufficient to raise new issues or warrant a new search. Accordingly, it is believed that the MPEP directs that this office action should be non-final because of its reliance on the newly cited. Gershman reference.

More significantly, the Office Action does not state any ground of rejection for claims 1, 3-10, 12-21, 23, 24, 26-28, 33-37 and 44-51. Although it appears that the Office action responds in the negative to the arguments made in the response filed on August 3, 2004, there is no indication that the rejections have been maintained. Because the Office Action leaves the status of claims 1, 3-10, 12-21, 23, 24, 26-28, 33-37 and 44-51 ambiguous, finality of the Office Action is believed to be improper and should be withdrawn.

#### **C. Response to Arguments.**

The Office action reasserts that Carter teaches the "processes that implement a RAID-type distribution" called for in claim 1, for example. However, Carter mentions a RAID device in passing at col. 16, line 45 when it states that one of its disks may comprise a RAID. This statement in Carter does not show

or suggest the use of processes that implement RAID-type distribution as called for in claim 1 as Carter does not hint at the nature of any processes used to implement the RAID disk mentioned in col. 16. Accordingly, it is respectfully requested that the arguments stated in the August 8, 2004 response be reconsidered.

Further, Carter does not show or suggest a parity scheme. The brief mention of RAID does not suggest parity as several RAID configurations do not use parity. Likewise, the replication or copying of data in multiple locations is a different concept than parity protection. Accordingly, it is respectfully requested that the arguments stated in the August 8, 2004 response be reconsidered.

With respect to communicating operational state information, Applicant maintains that even if Carter teaches communicating state information, Carter is limited to information describing the state of the data, not the state of the device(s) in which the data exists. These are very different types of state information. Accordingly, it is respectfully requested that the arguments stated in the August 8, 2004 response be reconsidered.

Further still, the Office action asserts that "fault tolerance" in Carter is the same as determining when a fault is likely. However, Carter is clear throughout that fault tolerance refers to behavior that occurs after a fault, not before a fault. In actuality, if one could anticipate a fault and migrate data prior to a fault as called for in some of Applicant's claims, "fault tolerance" as that term is typically used would no longer be necessary (assuming the fault anticipation operated perfectly, of course). Hence, the arguments made in the August 3, 2004 response are believed to be a correct interpretation of the Carter reference. Accordingly, it is respectfully requested that the arguments stated in the August 8, 2004 response be reconsidered.

**D. Rejections under 35 U.S.C. 102.**

Claims 52 and 53 were rejected under 35 U.S.C. 102 based upon Carter. This rejection is respectfully traversed. Claims 52 and 53 are distinct with

respect to Carter for at least the same reasons as claim 1, and because Carter does not show or suggest he RAID-type distribution comprises managing redundancy operations across the plurality of network-accessible devices. To the extent Carter teaches anything about RAID, it refers to a single disk or single device that provides RAID storage and does not show or suggest implementing such processes across several disks or devices. With respect to claim 53, the cited portion of Carter does not show or suggest anything about data striping, data mirroring, parity data distribution, parity data mirroring, and data entry as N-separated secrets. For at least these reasons the rejection of claim 52 and 53 should be withdrawn.

**E. Rejections under 35 U.S.C. 103.**

Claims 42-43 were rejected under 35 U.S.C. 103 based upon Carter in view of Gershman. This rejection is respectfully traversed.

Claims 42 and 43 are believed to be distinct over Carter for the reasons stated in the August 3, 2004 response. Specifically, Independent claim 42 calls for, among other things, providing a plurality of network accessible storage devices and “monitoring the data storage for faults” with storage management processes by having at least a portion of the plurality of network accessible storage devices transmitting heartbeat messages. Carter does not teach monitoring the devices. While Gershman is relied on to show a heartbeat message, Gershman does not supply the basic deficiency of Carter in that Gershman does not teach monitoring a plurality fo network accessible storage devices. Accordingly, claim 42 and claim 43, which depends from claim 42, are not made obvious by Carter in view of Gershman.

Claim 54 was rejected under 35 U.S.C. 103 based upon Carter in view of Thompson. Claim 54 depends from claim 21 and is believed to be allowable over Carter for the same reasons as claim 21. Thompson does not supply the deficiencies of Carter. Specifically, Thompson does not show or suggest a method of data storage management that calls for “communicating state information between the plurality of storage devices.” For at least these reasons

claim 54 is believed to be allowable over the relied on references either alone or in combination.

**F. Conclusion.**

In view of all of the above, claims 1, 3-10, 12-21, 23, 24, 26-28, 33-37, and 39-54 are now believed to be allowable and the case in condition for allowance which action is respectfully requested. Should the Examiner be of the opinion that a telephone conference would expedite the prosecution of this case, the Examiner is requested to contact Applicants' attorney at the telephone number listed below.

No fee is believed to be required by this response. Any fee deficiency associated with this submittal may be charged to Deposit Account No. 50-1123.

Respectfully submitted,

January 12, 2005

  
\_\_\_\_\_  
Stuart T. Langley, Reg. No. 33,940  
Hogan & Hartson LLP  
One Tabor Center  
1200 17th Street, Suite 1500  
Denver, Colorado 80202  
(720) 406-5335 Tel  
(303) 899-7333 Fax